

Method for Manufacturing Buried Insulating Layer Type Single Crystal Silicon Carbide Substrate and Manufacturing Device for the Same

Abstract

Provided is a manufacturing method of a buried insulating layer type semiconductor silicon carbide substrate excellent in flatness of an interfaces in contact the insulating layer and a manufacturing device thereof. In the manufacturing device, an SOI substrate having a buried insulating layer positioned on a silicon substrate and a surface silicon layer formed on this buried insulating layer is placed in this film formation chamber. The manufacturing device includes: the film formation chamber in which the SOI substrate is placed; a gas supplying unit for supplying various types of gasses required for the manufacturing of a buried insulating layer type semiconductor silicon carbide substrate into the film formation chamber; an infrared ray irradiating unit for irradiating the surface silicon layer of the SOI substrate with infrared rays; and a control part for controlling the gas supplying unit and the infrared ray ir-

radiating unit.